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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,031	12/28/1999	ROBERT DUNCAN DOVERSPIKE	104172	1768

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EXAMINER	
HA, YVONNE QUY M	

ART UNIT	PAPER NUMBER
2664	14

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/474,031	DOVERSPIKE ET AL.	
	Examiner	Art Unit	
	Yvonne Q. Ha	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 28 December 1999.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1, 3-5.7-13,15-38, is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1, 3-5.7-13,15-38, is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☒ Interview Summary (PTO-413) Paper No(s). 13.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5,7-13,15-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chao et al. (US Patent 6,549,513).

Referring to claims 1, 13, 21, 25, 28, 31, 34, and 37, Chao discloses a method that restores communication in a mesh network between a first end node and a second end node (col.4, lines 11-17, figure 1), comprising: transmitting a communication signal over a first communication path comprising the first end node (col. 4, lines 11-17, figure 1 node D), the second end node (figure 1, node C) and one or more first intermediate nodes (figure 1, nodes A, B); detecting an error condition in at least one of the first end node and the second end node (col. 4 , lines 58-60, i.e. alerting network the need for participation in restoration); and rerouting the communication signal over a second path having been determined before the error condition is detected (col. 5, lines 39-46), the second path including the first end node, the second end node, and one or more second intermediate nodes (col. 5 , lines 39-46; col. 6, lines 1-20), wherein the second intermediate nodes are disjoint from the one or more first intermediate nodes (col. 9, lines 27-65); the second path further includes one or more second transmission lines each having a plurality of channels (col. 10, lines 1-14, spare link has port ID, table 1), and at least one channel

used to reroute the communication signal is determined after the error condition is detected (col. 10, lines 49-56, restoration on spare link via appended information).

Referring to claim 3, Chao discloses all aspects of the claimed invention and further teaches sending one or more back-off commands to release at least one channel that had been assigned, after the error condition had been detected to carry the signal (col. 9, lines 58-64).

Referring to claim 4, Chao discloses all aspects of the claimed invention and further teaches the first and second nodes coordinate rerouting the communication signal over the second path (col. 11, lines 58-65).

Referring to claims 5, 11, 19, 23, 24, 27, and 30, Chao discloses all aspects of the claimed invention and further teaches the mesh network is an optical mesh network (col. 5, lines 39-46).

Referring to claims 7, 15, and 17, Chao discloses all aspects of the claimed invention and further teaches the step of rerouting the communication signal includes issuing commands, after the error condition is detected (col. 9, lines 58-64), in a direction from the first end node to at least one of second intermediate nodes to bi-directionally assign channels in one of the transmission lines (col. 12, lines 59-65, figure 3, table 3-bidirection), and issuing commands, after the error condition is detected, in a direction from the second end node to at least one of second intermediate nodes to bi-directionally assign channels in one of the transmission lines (col. 13 , lines 1-67;col. 14, lines 1-25).

Referring to claims 8, 22, 26, 29, and 38, Chao discloses all aspects of the claimed invention and further teaches the step rerouting the communication signal includes: responding to a failure indication sent from the first end node to the second end node (col. 12, lines 59-67, figure 3); and issuing commands from the second end node to the one or more second

intermediate nodes to bi-directionally assign channels along the second path (col. 13, lines 32-67).

Referring to claims 9, 10, and 18, Chao discloses all aspects of the claimed invention and further teaches the step of rerouting the communication signal includes issuing commands from the first end node to the one or more second intermediate nodes to unidirectionally assign channel along the second path in a first direction (col. 11, lines 64-67-col. 12, lines 1-35, table 2, figure 2 for unidirectional).

Referring to claims 12 and 20, Chao discloses all aspects of the claimed invention and further teaches channels are assigned to carry the communication signal over the second path using a contention technique (col. 13, lines 32-40, determining restore route when multiple restoration routes are available).

Referring to claim 16, Chao discloses all aspects of the claimed invention and further teaches the communication signal is rerouted from the first communication path to the second path based on a communication of the second end node (col. 13, lines 32-67, i.e. receiver node as selected for reroute).

Referring to claims 32 and 35, Chao discloses all aspects of the claimed invention and further teaches the identification of the second path is stored in first node. (col. 8, lines 43-50).

Referring to claims 33 and 36, Chao discloses all aspects of the claimed invention and further teaches assigning bi-directional channels in links of second path in direction from first toward second node irrespective whether second node has initiated concurrent assignment of bi-directional channels of the second path in direction from second to first node (col. 13, lines 1-67; col. 14, lines 1-18).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Chapman (US Patent 5,974,027) discloses channel switching protection arrangement
- Chow et al. (US Patent 5,495,471) discloses restoring a network based on a two prong approach
- Grover (US Patent 6,421,349) discloses distributed preconfiguration of spare capacity in closed paths for network restoration

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ajit Patel can be reached on 703-308-5347. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH

Ajit Patel
Primary Examiner

Claim Rejections - 35 USC § 102

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> A person shall be entitled to a patent unless –
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> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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